

Pollution Prevention and Energy Efficiency



The Pollution Prevention and Energy Efficiency ("P2E2") environmental financing program is based on a five-year-old cooperative framework agreement between the U.S. Environmental Protection Agency and the State Environmental Protection Administration of the People's Republic of China. P2E2 is a regular, non-controversial part of the agenda for each year's Joint Commission on Commerce and Trade ("JCCT") between the U.S. and Mainland China. As a result of a USEPA-SEPA September 2005 workshop in Beijing on pollution in the Mainland Chinese cement industry that was organized by SEPA's Deputy Director General LUO Gao Lai, SEPA's report on that event characterized P2E2 as "an attractive model for Chinese companies."

The P2E2 environmental financing program uses Hong Kong's legal and financial systems to mobilize private sector capital, management and technology from the U.S., Mainland China and elsewhere to provide solutions for Mainland China's growing energy conservation and air, water and ground pollution problems. P2E2 is a form of creative financing and public-private partnership that requires little or no public sector budgetary support to be effective.

P2E2 uses Asian Development Bank ("ADB") or International Finance Corporation ("IFC") loan guarantees (partial risk guarantees) and U.S. Export-Import Bank export credits and guarantees to enable Hong Kong commercial banks to make working capital loans, equipment leases and trade finance available to Hong Kong-based Environment and Energy Service Companies ("EESCO's"). These EESCO's, in turn, carry out P2E2 technology and equipment upgrade work on factories, power plants and real estate developments in Mainland China under performance contracts signed with Hong Kong corporate parents of energy-wasting, polluting Chinese facilities, or with Hong Kong subsidiaries of Mainland Chinese owners of energy-wasting, polluting Chinese facilities. The P2E2 model may be used by an EESCO to do P2E2 work in any Asian developing country provided a Hong Kong legal, financial and engineering platform is used.

When applied in the power generation sector, P2E2 generates emissions credits, either under the current Clean Development Mechanism of the Kyoto Protocol, or under any emissions trading regimes, which may come about under the Asia Pacific Partnership for Clean Development and Climate (which includes Australia, Mainland China, India, Japan, Korea and the United States of America). Some of the other industry sectors in which the P2E2 model may be applied are: aluminum, breweries, brick making, cement, chemicals, electronics, food processing, iron and steel, metalworking, paper and pulp, plastics, real estate development, and textiles.



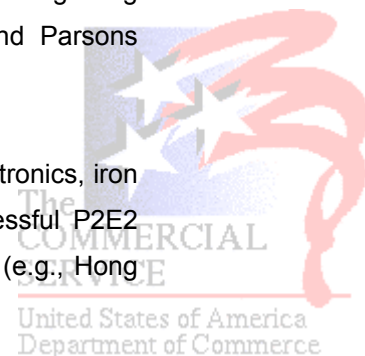
Private sector reactions to the P2E2 model have been uniformly favorable. P2E2 has the support of the American Chamber of Commerce in Hong Kong, the Federation of Hong Kong Industries and the Hong Kong Institution of Engineers. Nine Hong Kong commercial banks are interested in supporting the P2E2 program: Bank of China (Hong Kong) Limited, Bank of East Asia, Citic Ka Wah Bank, Dah Sing Bank, DBS (Development Bank of Singapore), Hang Seng Bank, HSBC (Hong Kong and Shanghai Banking Corporation), Standard Chartered Bank, and United Commercial Bank. Two investment funds support the P2E2 program: ITM Ventures in Hong Kong and FE Clean Energy in Singapore and Darien, Connecticut.

Citic Ka Wah Bank is the first Mainland Chinese bank in Hong Kong to apply for a Master Guarantee Agreement with the U.S. Export-Import Bank. Citic Ka Wah Bank applied to ExIm to increase its capabilities of lending into the environmental sector under its soon to be announced "Green Loan" program. Citic Ka Wah Bank intends to market the P2E2 approach to its end user customers in the textiles, electronics, paper and pulp, and other manufacturing sectors.

Around a dozen Hong Kong-based EESCO's are pursuing P2E2 opportunities in Mainland China by performing technical assessments of Mainland Chinese end users' facilities and negotiating performance contracts in Hong Kong with the corporate parents or subsidiaries of these end users. EESCO's currently known to the U.S. Commercial Service in Hong Kong are: CSTR (Conservation, System and Technology Research); Dover International, Ltd.; Dunwell Group (Enviro-Tech, New Logic and Environmental Management companies); EPPA (Environmental Protection Promotion Association, Ltd.); Honeywell Ltd. Automation & Control Solutions, Ltd.; Hong Kong Medical & Healthcare Device Manufacturers Association; Inergi Corporation; Johnson Control, Inc.; Optegy, Ltd.; Pacific Enterprises International; Trane Pacific; York International (Northern Asia) Ltd.; Ventronics (HK) Ltd.

Eight firms ("M&V Firms") are interested in measuring and verifying the cost savings EESCO's achieve by introducing P2E2 technologies into End Users' facilities in Mainland China. These firms are: Camp, Dresser & McKee; Enviro Solution (HK) Ltd.; ERM (Environmental Resources Management); Golder Associates (HK) Ltd.; HKPC (Hong Kong Productivity Council); Hong Kong Polytechnic University; Maunsell Environmental Management Consultants Ltd.; and Parsons Brinckerhoff (Asia) Ltd.

Sectors where EESCO's are active now with end users are: aluminum, cement, electronics, iron and steel and textiles. By May 2006, there should be 3-5 case studies of successful P2E2 projects involving EESCO's, M&V (Measurement and Verification) firms, End Users (e.g., Hong



Kong owners of Mainland Chinese industrial facilities), banks and investment funds. The P2E2 model, once applied, creates new buyers (i.e., EESCO's) for U.S. (and other countries') environmental and energy technologies as well as new export opportunities for U.S. (and other countries') financial, legal and engineering services firms.

February 20, 2006

